SBR No. 35/16-17
31-5-16

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209101

Serial No. 2nd and final Bill

Name of Work ..... From BR-15/31-5-16 To .....

Name of Contractor of nature of Agency .....

Date of commencement of work D.O. Record 30/05/2016

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of Work: Imp and Asphalting to Roads at Kurumpa Nagara. 2nd stage in Ward No. 11 (Kurumpa Nagara) Vidyarayapura Sub Divn.						
	Estimated Cost Rs. 30.006 lks						
	NB. No : 011-15-000002						
	Work order No : EE/BTP/BBMP/E-PMT-16(13867)/W0/219/2015-16 Dt. 16-02-2016						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Date of Commencement : 17-02-2016						
	Date of Completion : 18-04-2016						
	① Earthwork Excavation by manual means in ordinary soil, involving an average horizontal throw upto 2 m and an average lift upto 0.00m, excavated surface levelled and sides neatly dressed, the disposed Earth to be levelled neatly after breaking clods complete as per specifications, items & conditions 3 With lead and lift and as per the directions of						

M. A.
Me

Serial No. .....
Name of Work ..... From
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number
1	2	3
	Engineer-in-charge of	
	2) Earthwork excavation by dual, involving an avera 2 m and an average lift surface levelled and disposed Earth to be	

Contents	Measurement
7	8
in Ordy w upto 2 orated surface disposed kgoy clods chanpes- reches of	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209102

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Engineer-in-charge of the work.						
	Qty as per this MB. p. 20917						
	# as ① 573.75 @ ~~75.00~~ 80.00					45900.00	
2)	Earthwork excavation by manual means in hard soil, involving an average horizontal throw upto 2m and an average lift upto 0.5 mts, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after brick						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	of slabs complete as per specifications and with all lead and lift and as per the directions of Engineer-in-charge of work.						
						Qty as per this MB of 209176	
						Item no. (3) = 677.25 m3	
						@ ~~105.84~~ 110.00 /m3	74497.50
37)	Removing of B.C. debris, dross and stacking etc complete with lead and lift and as per the directions of Engineer-in-charge of the work.						

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
(4)	Refixing of stone s in CM(1:3) etc complete Engineer-in-charge

OK

Depth 6	Contents 7	Reference to last Measurement 8
o and directions of		
s MB p 209176	2 677.25 m3 @ ~~105.84~~/m3 = 110.00	74497.50
sfactory on per the Work.		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209103

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
			Qty as per MB p 209178				
			as per ✱ no. (5)			= 1225.~~00~~42 @ ~~58.32~~/m2 = 65.00	79625.00
							79677.00
(4)	Refacing of stone slabs of drains and pointing in cm(1:3) etc complete as per the directions of Engineer-in-charge of the work.						
			Qty as per ✱ no. (3)			= 1225.~~00~~42 @ 80/m2	98000.00
							98064.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
5)	Providing and laying, spreading and compacting graded stone aggregate to wet mix macadam specifications including processing the material with water at OMC in mechanical mix plants Conveyance of mixed materials by tipper to site, laying in uniform layers with paver in subbase/base course on well prepared surface and Compacting with Vibratory Roller to achieve desired density Complete as per specification						

Serial No. .....

Name of Work ..... From

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Number
1	2	3
	and directions of Engr	
6)	Cleaning the Existing including removing of other foreign matter	

OK

Depth 6	Contents 7	Reference to last Measurement 8
compacting the Mulching material and mix plant upper to site, ver in Subbase surface and achieving specification		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209104

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	and directions of Engineer-in-charge of Work. (Vide this MB P 209178 Item no. (4)					677.25 @ ~~1438.56~~ 1500.00/m³	1015875.00
	b) Clearing the Existing WBM Road surface including removing of binding materials and other foreign matters with brooms or soft						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	brushes and finally dusting with old gunny bags and or compressed air to receive the bituminous treatment including costing of materials, labour, Hiring machineries, curing complete as per Specifications and directions of Engineer-in-Charge of the work						
	(a) Kuvempunagar, 2nd Stage Thirveni Road	1	30.00	$\frac{4.4+4.3}{2}$	=	130.35 m²	
		1	26.50	$\frac{4.3+5.6}{2}$	=	131.28	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	(b) CROSS - ROAD - 2
	(c) CROSS - ROAD - 3
	(d) Singapura layout 6m wide

T BOOK

sions		Contents	Reference to last Measurement
Breadth 5	Depth 6	7	8

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	(e) 7th main Road	1	30.00	$\frac{5.70+5.60}{2}$		= 169.50	
		1	30.00	$\frac{5.60+5.70}{2}$		= 169.50	
		1	29.00	$\frac{5.70+6.30}{2}$		= 174.00	
		1	30.00	$\frac{6.50+6.70}{2}$		= 198.00	
		1	30.00	$\frac{6.70+5.70}{2}$		= 186.00	
		1	30.00	$\frac{5.70+5.60}{2}$		= 169.50	
		1	21.50	$\frac{5.60+5.60}{2}$		= 120.40	
	(d) Cross-Road-3	1	30.00	$\frac{5.40+5.30}{2}$		= 159.00	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	N
1	2	
	(9) Cross-Road-2	

BOOK

dth	Depth 6	Contents 7	Reference to last Measurement 8
	5.60	= 169.50	
	5.70	= 169.50	
	6.30	= 174.00	
	6.70	= 198.00	
	5.70	= 186.00	
	5.6	= 169.50	
	5.60	= 120.40	
	5.2	= 159.00	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209106

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	(1) CROSS-ROAD.2	1	16.00	5.2+5.20/2		= 83.20	
		1	30.00	4.30+4.2/2		= 127.50	
		1	10.00	4.20+4.4/2		= 43.00	
		1	30.00	3.60+3.90/2		= 112.50	
		1	30.00	3.9+4.2/2		= 121.50	
		1	21.50	4.20+5.0/2		= 98.90	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
(h)	CROSS-Road-1- 6th main	1	30.40	$\frac{5.1+5.10}{2}$		= 153.40	
		1	13.80	$\frac{5.10+5.0}{2}$		= 69.69	
(i)	CROSS-Road-1- 7th main 4/s	1	35.80	$\frac{4.0+4.2}{2}$		= 146.78	
(j)	CROSS-Road-2 7th main-4/s	1	33.30	$\frac{3.80+3.8}{2}$		126.54	
(k)	CROSS-Road-2 7th main - R/s	1	30.40	$\frac{4.60+4.5}{2}$		136.50	
		1	20.30	$\frac{4.50+4.7}{2}$		= 93.38	
(l)	CROSS-Road-3, 7th main R/s	1	30.40	$\frac{4.20+3.70}{2}$		= 118.30	
		1	21.40	$\frac{3.70+4.3}{2}$		= 85.60	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	N
1	2	
(m)	CROSS-Road-4 7th main R/s	
(n)	for portions -	
7)	Provide and apply ma	

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Pa

ENT BOOK

Dimensions			Contents	Reference to last Measurement
th	Breadth 5	Depth 6	7	8
0	5.14 5.10 / 2		= 153.40	
80	5.14 + 5.2 / 2		= 69.69	
0	4.0 + 4.2 / 2		= 146.78	
	3.80 + 3.8 / 2		126.54	
	4.60 + 4.5 / 2		136.50	
	4.50 + 4.7 / 2		= 93.38	
0	4.20 + 3.70 / 2		= 118.30	
0	3.70 + 4.3 / 2		= 85.60	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209107

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
(m)	CROSS- Road. 4 7th main Rd	1	30.40	3.60 + 3.60 / 2		= 108.40	
		1	23.50	3.60 + 4.20 / 2		= 91.65	
(n)	for pot holes -		9% on qtr. Th of the MBP			= 370.00	
				Total		4519.17	
				Limited to		4515.40 sq.m	
				@		12.20 / 14.00 sq.m	55101.00 @ 632.10.00
7)	Providing and applying primer coat for surfaces of						

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	medium possity like cement stabilized soil base @ 1.10 kg/m2 over prepared surface with S.S. bitumen emulsion using bitumen tanker fitted with spray set. (Excluding cleaning of Road surface) including costing all material, labour hire of machinery complete as per specification morth specification no. 502. With all lead and Lift and as per the direction of Engineer-in charge of the work						

T BOOK

nsions		Contents	Reference to last Measurement
Breadth 5	Depth 6	7	8
...h stabilized soil ...ared surface with ...y bitumen tanker ...udy cleaning of ...y all material, ...mplete as per ... no. 502. with ...direction of ... ... pit - 10 no. (6)			

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209108

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
8)	Providing and laying Semi dense bituminous Concrete Using Crushed aggregates of specified grading Premixed with bituminous binder and filler, transporting the hot mix to Work site, laying with paver finisher to the required grade level and alignment, Rolling with smooth Wheeled, Vibratory and tandem Rollers to achieve the desired Compaction.	=	4515 m² @ 79.00 /m²			3,36,458 m² 3,56,685 m²	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	as per approved specification and as per the direction of Engineer-in-charge of the works.						
	(a) Kuampunayan 2nd Stage Internal Road [WO516]					Abs	
		1	30.50	$\frac{4.4+4.3}{2}$	0.025	3.284	
		1	26.50	$\frac{4.3+3.6}{2}$	0.025	3.28	
	(b) Cross-Road-2 [WO518]	1	30.50	$\frac{5.6+5.7}{2}$	0.025	4.24	
		1	29.50	$\frac{5.7+5.2}{2}$	0.025	3.43	
	(c) Cross-Road-3 31/5 [WO520]	1	30.50	$\frac{3.8+4.3}{2}$	0.025	3.04	
		1	30.50	$\frac{4.3+3.6}{2}$	0.025	2.96	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	(d) Singapura Layout 6M Main [WO627]
	31/5
	(e) 7M Main Road

M. A. R. 57 (Rule 116) **No. B**

Measurement Book

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	(d) Singapura Layout 6m main [W0627]	1	25.50	$\frac{3.6+4.5}{2}$	0.025	2.58	
		1	30.40	$\frac{6.0+5.7}{2}$	0.025	4.39	
		1	30.40	$\frac{5.7+5.1}{2}$	0.025	4.24	
		1	30.40	$\frac{5.6+5.7}{2}$	0.025	4.24	
		1	29.40	$\frac{5.7+6.3}{2}$	0.025	4.35	
	(e) 7th main Road	1	30.40	$\frac{6.5+6.7}{2}$	0.025	4.90	
		1	30.40	$\frac{6.7+5.7}{2}$	0.025	4.66	

BOOK

Contents 7	Reference to last Measurement 8
per the drawing	
Avg	
0.025 = 3.264	
0.025 = 3.28	
0.025 = 4.24	
0.025 = 3.43	
0.025 = 3.04	
0.025 = 2.76	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	(d) CROSS-ROAD-3 [W0629]	1	30.40	$\frac{5.2+5.6}{2}$	0.025	= 4.24	
		1	21.50	$\frac{5.6+5.6}{2}$	0.025	= 3.01	
		1	30.40	$\frac{5.4+5.2}{2}$	0.025	= 3.78	
		1	16.40	$\frac{5.2+5.2}{2}$	0.025	= 2.08	
		1	30.40	$\frac{4.3+4.2}{2}$	0.025	= 3.19	
		1	10.40	$\frac{4.2+4.5}{2}$	0.025	= 1.06	
	Checked. 31/5	1	30.40	$\frac{3.6+3.9}{2}$	0.025	= 2.81	
		1	30.40	$\frac{3.9+4.2}{2}$	0.025	= 3.04	
	(g) CROSS-ROAD-2 [W0490]	1	21.50	$\frac{4.2+5.0}{2}$	0.025	= 2.47	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	N
1	2	
	(h) CROSS-ROAD-1 [W0498] 6m mas.	
	(i) CROSS-ROAD-1 7m mas - 4L [W0502]	
	(j) CROSS-ROAD-2 7m mas-4L	
	(k) CROSS-ROAD-2, 7m mas-RL [W0500]	
	(l) CROSS-ROAD-3	

7m mas-RL (

NT BOOK

nensions		Contents	Reference to last Measurement
Breadth 5	Depth 6	7	8
$\frac{5.7+5.6}{2}$	0.025	= 4.24	
$\frac{5.6+5.6}{2}$	0.025	= 3.01	
$\frac{5.4+5.2}{2}$	0.025	= 3.78	
$\frac{5.2+5.2}{2}$	0.025	= 2.08	
$\frac{4.3+4.2}{2}$	0.025	= 3.19	
$\frac{4.2+4.5}{2}$	0.025	= 1.06	
$\frac{3.6+3.9}{2}$	0.025	= 2.81	
$\frac{3.9+4.2}{2}$	0.025	= 3.04	
$\frac{4.2+5.0}{2}$	0.025	= 2.47	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209110

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	(h) CROSS-Road-1 (WO498) BM mas.	1	30.40	$\frac{5.1+5.1}{2}$	0.025	= 3.85	
		1	13.80	$\frac{5.1+5.0}{2}$	0.025	= 1.74	
	(i) CROSS. Road-1 7m mas - LS (WO502)	1	35.80	$\frac{4.0+4.2}{2}$	0.025	= 3.67	
	(j) CROSS. Road-2 7m mas. LS	1	33.30	$\frac{3.8+3.8}{2}$	0.025	= 3.16	
	(k) CROSS. Road-2, 7m mas - RLS (WO500)	1	30.40	$\frac{4.6+4.5}{2}$	0.025	= 3.41	
		1	20.30	$\frac{4.5+4.7}{2}$	0.025	= 2.33	
	(l) CROSS. Road-3	1	30.40	$\frac{4.2+3.7}{2}$	0.025	= 2.86	

7m mains - RLS (WO494)

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		1	21.40	$\frac{3.7+4.3}{2}$	0.025	= 2.14	
(m)	Cross-Road-4, 7m mass-R/W (Lwo 492)	1	30.00	$\frac{3.6+3.6}{2}$	0.025	= 2.70	
		1	23.50	$\frac{3.6+4.2}{2}$	0.025	= 2.29	
(n)	for. Pot hole filling.		Qty as per. Est.			= 9.25 m³	
					Total B	112.98 m³	
					Add to	112.88 m³	
					@ 11000.00/m³		₹ 12,49,581.60 12,98,120.00
(9)	Lead for Disposal of debris shall be payable at carriage rates by Mechanical means including						

ASSISTANT ENGINEER
Vidyanagar Sub Division
Bruhath Bengaluru Mahanagara Palike

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	loading and unloading

Certificate

(1) certified that the work has been satisfactorily executed.

(2) The contractor has

OK

Depth 6	Contents 7	Reference to last Measurement 8
0.025 = 2.14		
0.025 = 2.70		
0.025 = 2.29		
= 9.25	y^3	
	112.98 y^3	
	112.88 y^3	
	0.00/y^3	₹ 12,49,581.60 / 12,98,120.00
be payable		
s including		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209111

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

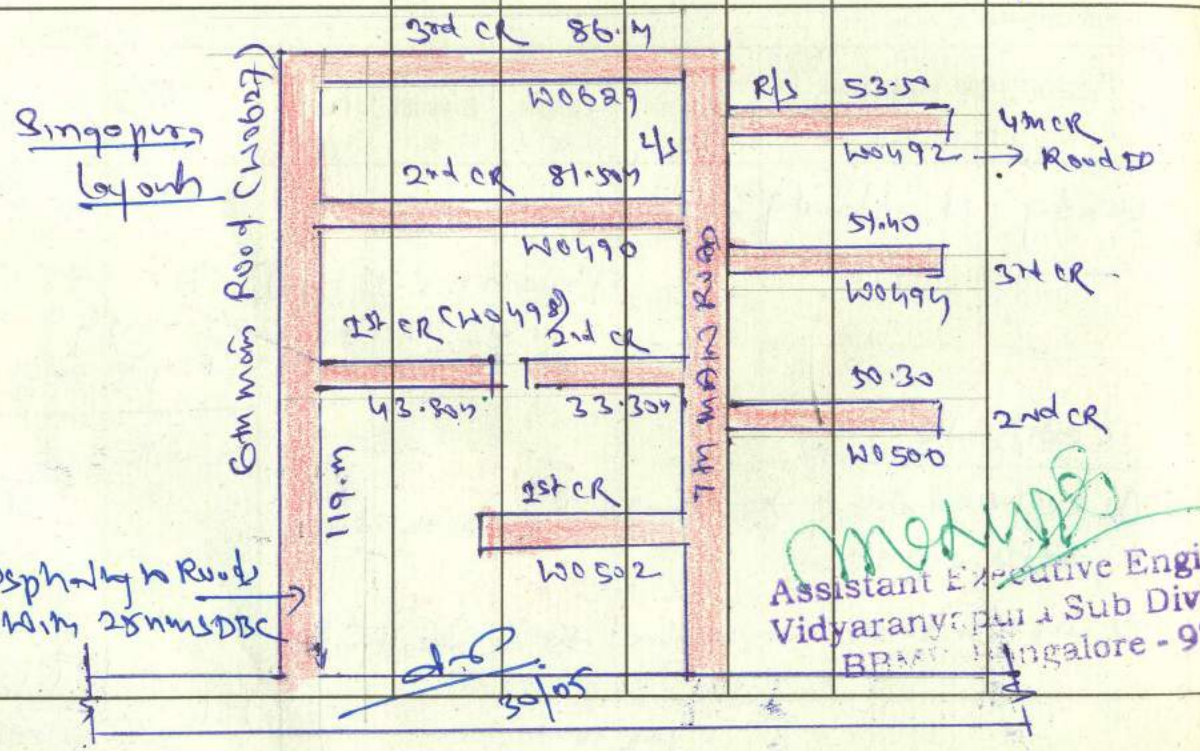
Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	loading and unloading - charges.						
	=					9kg empty No ① + ② (573.75 + 677.25) = 1251 y^3 Add 10% 1025.824 y^3	82065.60
	Certificate					Total ₹	31,14,094.10 / 31,13978.00
	① certified that the Contractor work done satisfactorily.						
	② The Contractor has removed the debris from site.						

Dt 30/05
Dt Nil

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8



Assistant Executive Engin
Vidyaranyapura Sub Divis
BBMP Bangalore - 97

M. A. R
Meas

Serial No. .....
Name of Work ..... From...
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number
1	2	3

Singa

Kuvempunagar
2nd Stage.

Thyagaraj

30/05

BOOK

ons		Contents	Reference to last Measurement
readth 5	Depth 6	7	↑N 8
	R/S	53.5m	4m CR
		W0492 → Road D	
		51.40	3rd CR
		W0494	
		50.30	2nd CR
		W0500	

Assistant Executive Engin
Vidyaranyapura Sub Divis
BBMP, Bangalore - 97

M. A. R. 57 (Rule 116)
Measurement Book

No. B 209112

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
							↑N
			Sompura Road				
						Kuvempudayan. 2nd Stage Bus stop	
	Kuvempudayan 2nd Stage.	Thyagaraja		56.50			
				W0516			
				59.80			
				W0518			
				85.3m			
				W0520			

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

BD-155
31/5/16

SUREMENT BOOK

Date	Full description, etc,	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

Audited & Admitted for Rs
3113972-00

2882916-00 by cheque
and Rs 231054-00 by cash

Krishnaprasad
Accts. Supdt.
Byatarayanapura Dn.
BBMP

18/6

IT - 31140.00
VAT - 124559.00
LWF - 3114.00
CSF - 3114.00
SR - 41101.00

Total 2310546.00

SBRAO-36/16-

Serial No. 2nd and final Bill
Name of Work
Name of Contractor of nature of Agency
Date of commencement of work

Date	Full description, etc, of work
1	2
	Name of work :
	Estimated Cost Rs
	NB-Code
	Head of A/c's